Claims

1. A waterproofing material in sheet form comprising a core layer (10), which incorporates swellable bentonite clay, sandwiched between respective carrier layers (12, 14), characterised in that the carrier layers (12, 14) are connected to each other by ultrasonic welding (18; 26, 28) at intervals or along one or more lines.

2. A material according to claim 1 wherein at least one of the carrier layers (12, 14) comprises a non-woven textile fabric.

3. A material according to claim 1 or 2 wherein the carrier layers (12, 14) comprise polypropylene, polyethylene or polyvinylchloride.

4. A material according to any of claims 1, 2 or 3 including a further layer which is an impermeable film or membrane.

5. A material according to any of claims 1, 2 or 3 wherein an impermeable film or membrane is provided at the locations of ultrasonic welding.

6. A material according to any preceding claim wherein the core layer (10) is formed by extrusion or rolling from a deformable plastics mass wherein the bentonite is semi-hydrated.

7. A material according to any preceding claim wherein a flexible perforate reinforcement (16) is included in the core layer.

8. A material according to claim 7 or 8 wherein the reinforcement is a mesh (16) of plastics material.

9. A material according to claim 7 or 8 wherein one of the carrier layers (12) is connected to the reinforcement (16) by a first series of ultrasonic welds (26) and the other of the carrier layers (14) is connected to the reinforcement (16) by a second series of ultrasonic welds (28), which are offset in position relative to the first series.

10. A method of producing a waterproofing material in sheet form comprising sandwiching a core layer (10) incorporating swellable bentonite clay between respective carrier layers (12, 14) and connecting the carrier layers by ultrasonically welding (18; 26, 28) at intervals or along one or more lines.

11. A method of producing a waterproofing material in sheet form comprising sandwiching a core layer (10) incorporating swellable bentonite clay between respective carrier layers (12, 14) and including a mesh reinforcement (16) within the core layer, connecting one of the carrier layers (12) to the reinforcement by ultrasonically welding at a first series of locations (26) and connecting the other of the carrier layers (14) to the reinforcement by ultrasonic welding at a second series of locations (28) which are offset relative to the first series.